

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-18. (Canceled)

19. (Currently amended) A method of producing a ~~recombinant~~ chicory plant that exhibits cytoplasmic male sterility comprising:

(a) ~~introducing~~ integrating into a cell genome of a chicory plant a mitochondrion of a nucleotide sequence conferring cytoplasmic male sterile plant sterility, wherein the nucleotide sequence comprises a 347 bp fragment of the orf 522 sequence of *Helianthus annuus* or a sequence having at least 90% similarity with the fragment;

(b) identifying, in the chicory plant or cell thereof, a detecting the a 347 bp fragment of said orf 522 comprising the nucleotide sequences of SEQ ID NO: 1 and SEQ ID NO: 2. in the genome; and

~~(c) selecting a chicory plant that exhibits male sterility based on detecting the fragment in the genome.~~

20. (Canceled)

21. (Previously presented) The method of claim 19, wherein the chicory plant comprises a nucleus from *Cichorium intybus* or *Cichorium endivia*.

22. (Canceled)

23. (Currently amended) The method of claim 19, wherein identifying ~~detecting~~ comprises contacting the fragment with a labeled probe comprising at least ten nucleotides of the fragment.

24. (Currently amended) The method of claim 19, further comprising crossing the ~~recombinant~~ chicory plant with a second chicory plant.

25. (Previously presented) The method of claim 24, wherein the second plant does not exhibit cytoplasmic male sterility.

26. (Currently amended) A method of producing a ~~recombinant~~ chicory plant cell that expresses cytoplasmic male sterility comprising:

(a) fusing ~~[[a]]~~ chicory plant ~~cells~~ cell with ~~[[a]]~~ cells of a second plant cell that comprises a nucleotide sequence conferring cytoplasmic male sterility, wherein the nucleotide sequence comprises a 347 bp fragment of the orf 522 comprising the nucleotide sequences of SEQ ID NO: 1 and SEQ ID NO: 2 sequence of *Helianthus annuus* ~~or a sequence having at least 90% similarity with the fragment;~~

(b) detecting the fragment in the plant cells. ~~cell; and~~

~~(c) selecting a plant cell that expresses cytoplasmic male sterility based on detecting the fragment in the plant cell.~~

27. (Previously presented) The method of claim 26, wherein the plant cell comprises a nucleus from *Cichorium intybus* or *Cichorium endivia*.

28. (Previously presented) The method of claim 26, wherein the second plant cell is from *Helianthus annuus*.

29. (Canceled)

30. (Previously presented) The method of claim 26, wherein detecting comprises contacting the fragment with a labeled probe comprising at least ten nucleotides of the fragment.

31. (Previously presented) The method of claim 26, further comprising propagating the recombinant plant cell and producing a recombinant chicory plant.

32. (Previously presented) The method of claim 31, further comprising crossing the recombinant chicory plant with a second chicory plant.

33. (Previously presented) The method of claim 32, wherein the second plant does not exhibit cytoplasmic male sterility.

34 - 36. (Canceled)